

Appl. No. 10/700,100
Amdt. Dated August 9, 2006
Reply to Office Action of June 12, 2006

Attorney Docket No. 81784.0289
Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): An optical disk drive for reading data from an optical disk, the optical disk storing the data and security information associated with the data, identical security information being stored at a plurality of locations on the optical disk, the optical disk drive comprising:

a reading section for reading the data and the security information from the optical disk; and

an access restricting section for restricting the reading of data, based on the security information associated with the data to be read, during when the data is read from the optical disk using the reading section, wherein a comparison is made among fragments of the security information read from the plurality of locations on the optical disk to be read, and the access restricting section restricts the reading of the data to be read based on a security information fragment with the highest frequency;

wherein the security information is information represented by a string of consecutive bits, and the access restricting section compares, for each column of bits, bit values read as the security information from the plurality of locations, and selects a bit value with the highest frequency in each column of bits as a correct bit value in the column of bits.

2. (Cancelled).

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3. (Currently Amended): ~~An optical disk drive according to claim 1, further comprising An optical disk drive for reading data from an optical disk, the optical disk storing the data and security information associated with the data, identical security information being stored at a plurality of locations on the optical disk, the optical disk drive comprising:~~

a reading section for reading the data and the security information from the optical disk;

an access restricting section for restricting the reading of data, based on the security information associated with the data to be read, during when the data is read from the optical disk using the reading section, wherein a comparison is made among fragments of the security information read from the plurality of locations on the optical disk to be read, and the access restricting section restricts the reading of the data to be read based on a security information fragment with the highest frequency; and

an error detection section for detecting an error frequency in the data read by the reading section, wherein the access restricting section corrects the security information based on the data error frequency obtained by the error detection section.

4. (Currently Amended): An optical disk drive according to claim 3, comprising a writing section for writing data and security information associated with the data onto an optical disk, wherein identical security information is written at a plurality of locations on the optical disk.

5. (Cancelled).

6. (Currently Amended): An optical disk drive security control method for providing control over data stored on an optical disk, the optical disk storing the data and security information associated with the data, identical security information being stored at a plurality of locations on the optical disk, the security control method comprising the steps of:

reading the security information associated with the data subject to security control from the plurality of locations on the optical disk; and

determining correct security information by comparing fragments of the security information read from the plurality of locations and then by selecting a security information fragment with the highest frequency, wherein the correct security information is used in processing of the data subject to security control;

wherein the security information is information represented by a string of consecutive bits, and the correct security information is determined by comparing, for each column of bits, bit values read from the plurality of locations and then by selecting a bit value with the highest frequency in each column of bits as a correct bit value in the column of bits.

7. (Cancelled).

8. (Currently Amended): An optical disk drive security control method according to claim 6, further comprising the step of An optical disk drive security control method for providing control over data stored on an optical disk, the optical disk storing the data and security information associated with the data, identical security information being stored at a plurality of locations on the optical disk, the security control method comprising the steps of:

reading the security information associated with the data subject to security control from the plurality of locations on the optical disk;

determining correct security information by comparing fragments of the security information read from the plurality of locations and then by selecting a security information fragment with the highest frequency, wherein the correct security information is used in processing of the data subject to security control; and

detecting an error frequency in the data stored on the optical disk, wherein the correct security information is determined based on the error frequency.

9. (Currently Amended): An optical disk drive security control computer readable recording medium storing a program product for providing control over data stored on an optical disk, the optical disk storing the data and security information associated with the data, identical security information being stored at a plurality of locations on the optical disk, the security control program product comprising computer readable program code for causing a computer to perform the steps of:

reading the security information associated with the data subject to security control from the plurality of locations on the optical disk; and

determining correct security information by comparing fragments of the security information read from the plurality of locations and then by selecting a security information fragment with the highest frequency;

wherein the security information is information represented by a string of consecutive bits, and the correct security information is determined by comparing, for each column of bits, bit values read from the plurality of locations and then by selecting a bit value with the highest frequency in each column of bits as a correct bit value in the column of bits; and

further including the step of restricting access so as to restrict reading of data to be read, based on the correct security information determined in the step of determining correct security information.

10. (Cancelled).

11. (Currently Amended): An optical disk drive security control program product according to claim 9, An optical disk drive security control computer readable recording medium storing a program for providing control over data stored on an optical disk, the optical disk storing the data and security information associated with the data, identical security information being stored at a plurality of locations on the optical disk, the security control program product comprising computer readable program code for causing a computer to perform the steps of:

reading the security information associated with the data subject to security control from the plurality of locations on the optical disk; and

determining correct security information by comparing fragments of the security information read from the plurality of locations and then by selecting a security information fragment with the highest frequency;

wherein the program code further causes the computer to perform the step of detecting an error frequency in the data stored on the optical disk, and the correct security information is determined based on the error frequency.; and

further including the step of restricting access so as to restrict reading of data to be read, based on the correct security information determined in the step of determining correct security information.

12. (New): An optical disk drive according to claim 1, comprising a writing section for writing data and security information associated with the data onto an optical disk, wherein identical security information is written at a plurality of locations on the optical disk.